

INDICATOR SPECIES

By
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Synopsis: Ditty learns that changes environmental indicator species can mean trouble for the environment.

Concepts: Pollution, historical indicators, genetics, mutations, ecosystems, amphibians, insects, environmental indicators, environmental interconnectivity.

Cast: Staff Ditty Frog Beetle

Staff: Hi Ditty. What's up?

Ditty: I was just trying to think of how things would be with No Pollution ... A perfect world.... Things like that.

Staff: Let me see if I can help. Picture yourself in a boat on a river...

(Singing Beetle's song Lucy in the Sky with the Diamonds)

Ditty: (interrupting) with tangerine trees and marmalade skies.

Staff: Nooo. Let me try another way. Imagine...

(Singing John Lennon's song Imagine)

Ditty: (interrupting again) there's no heaven. You know it's easy if you try.

Staff: One more try here. Did you read the news today?

Ditty: Yeah I did.

Staff: Okay now we are getting somewhere...

(Singing Lennon/McCartney's song A Day in the Life)

Ditty: I read the news today about a lucky man who made the grade. But the news was rather sad.

Staff: Aaaaah!

Frog: (Comes onstage)
Hey, what's with all the Beatle songs?

Staff: Ditty seems to be a broken record today.

Beetle: (Comes onstage) Did someone say beetle songs? I know a lot of songs about beetles.

Frog: Hey, lunch is here.

Staff: Stop! All of you just STOP!

Ditty: Man, what got into him today? You would think his best friend just mutated or something.

Staff: Well, now that you've brought up that subject maybe we can discuss it.

Ditty: What, your best friend is a mutant? How Cool!

Staff: No, what I am talking about is mutations, and indicator species and pollution.

Ditty: Uh, Oh! He's using big words. Usually that means I am going to learn something.

Frog: No, Ditty. This is important. This affects me, you and everyone else.

Beetle: Yeah, I know something about indicator species.

Ditty: What do you know? You are just a bug.

Beetle: Well, for one thing beetles and frogs can be indicator species.

Ditty: Uh, what is an indicator species?

Beetle: So, you think I may know something after all?

Staff: An indicator species is like a long time ago they sent a canary into a coal mine. Before modern instruments, canaries were used to tell coal miners whether the air in a shaft was safe to breath.

Ditty: Canaries? Coal mines? I thought I was going to learn about indicator species. He's old guys, just ignore him and tell me about those indicators.

Frogs: Many species, in particular amphibians and insects, serve as indicators of environmental change.

Beetle: For example, take beetles.

Ditty: I heard you can't take beetles anywhere.

Beetle (ignoring ditty): Some beetle species feed on only one type of plant. If that plant disappears so do those beetles. This can give us a good idea of what is happening in a particular ecosystem.

Frog: Frogs are an even better indicator of global disaster. Because frogs are amphibians, they are very sensitive to pollution.

Ditty: What is an amphibian?

Staff: An amphibian, Ditty, is an animal that can live on both land and water. Go on, Mr. Frog - tell us some more.

Frog: Because frogs are sensitive to pollution they can easily absorb pollutants through their skin. And when you start seeing a decline in the number of frogs in the area or mutations such as missing legs or extra legs then you can suspect there is something going on in that environment.

Ditty: Finally, we get to hear about mutants.

Beetle: Big deal. You guys mutate. At least you are still alive. Beetles die when something is wrong with the environment.

Ditty: Here we go. Who is better at predicting bad news? Guys, I don't think this is a contest either one of you wants to win.

Staff: Yeah, Ditty. No matter who wins we all lose. When something goes wrong in an indicator species that tells us that we are messing up our environment. After that it's only a matter of time before pollution start to affect people, too.